Lesson Plan

	Discipline:Electrical Engineering	Semester-3rd Winter 2023 (B)	Name of the Teachng Faculty: PRIYABRATA PALASINGH NAYAK
Sl. No.	Subject-Electrical Engineering Material	No. Of Days/ Week class alloted:04	Semester From date: 07/08/2023 To date: 30/11/2023 No of weeks: 16
	Weeks/Months	Class Day	Topic
1	1st Week	1st(07.08.2023	1 . 1 Introduction
		2ns(08.08.2023	1 . 2 Resistivity, factors affecting resistivity
		3rd(11.08.2023	1 . 3 Classification of conducting materials into low-resistivity
		4th(12.08.2024	1 . 3 Classification of high resistivity materials
2	2nd Week	1st(14.08.2023	1 . 4 Low Resistivity Materials and their Applications. (Copper, Silver, Gold, Aluminum, Steel)
		2nd(18.08.2023	1 . 4 Low Resistivity Materials and their Applications. (Copper, Silver, Gold, Aluminum, Steel)
		3rd(19.08.2023	1 . 5 Stranded conductors.
3	3rd Week	2nd(21.08.202	1 . 7 Low resistivity copper alloys.
		3rd(22.08.2023	1 . 8 High Resistivity Materials and their Applications(Tungsten,)
		3rd(25.08.2023	1 . 8 High Resistivity Materials and their Applications(Carbon)
		4th(26.08.2023	Platinum
4	4th Week	1st(28.08.2023	Mercury
		2nd(29.08.2023	1 . 9 Superconductivity.
		3rd(01.08.2023	1 . 10 Superconducting materials.
		4th(02.09.2023	1 . 11 Application of superconductor materials.
5	5th Week	1st(04.09.2023	**Semiconducting Materials:** 2 . 1 Introduction
		2nd(05.09.2023	2 . 2 Semiconductors 2 . 3 Electron Energy and Energy Band Theory
		3rd(08.09.2023	2 . 4 Excitation of Atoms 2 . 5 Insulators, Semiconductors and Conductors2 . 4 Excitation of Atoms
		4th(09.09.2023	2 . 6 Semiconductor Materials 2 . 7 Covalent Bonds
6	6th Week	1st(11.09.2023	2 . 8 Intrinsic Semiconductors 2 . 9 Extrinsic Semiconductors
		2nd(12.09.2023	2 . 10 N-Type Materials 2 . 11 P-Type Materials
		2nd(15.09.2023	2 . 12 Minority and Majority Carriers 2 . 13 Semi-Conductor Materials
		4th(16.09.2023	14 Applications of Semiconductor materials 2.14.1 Rectifiers
		1st(18.09.2023	2.14.2 Temperature-sensitive resisters or thermistors 2.14.3 Photoconductive cells

7	7th Week	2nd(22.09.2023	Varisters 2.14.6 Transistors 2.14.7 Hall effect generators 2.14.8 Solar power
		3rd(23.09.2023	**Insulating Materials: 3 . 1 Introduction**
8	8th Week	1st(25.09.2023	3.2.2 Visual properties 3.2.3 Mechanical properties
		2nd(26.09.2023	3.2.4 Thermal properties 3.2.5 Chemical properties
		3rd30.09.2023	3.2.6 Ageing 3.3 Insulating Materials – Classification, properties, applications
			3.3.1 Introduction 3.3.2 Classification of insulating materials on the basis physical and chemical
9	9th Week	1st(03.10.2023	3.4 Insulating Gases,3.4.2 Commonly used insulating gases
		2nd(06.10.2023	Dielectric Materials: 4.1 Introduction
		3rd(07.10.2023	4.2 Dielectric Constant of Permittivity
			4.3 Polarization
10	10th Week	1st(09.10.2023	4.4 Dielectric Loss
		2nd(10.10.2023	4.5 Electric Conductivity of Dielectrics and their Break Down
		3rd(13.10.2023	4.6 Properties of Dielectrics.
		4th(14.10.2023	4.7 Applications of Dielectrics.
11	11th Week	1st(16.10.2023	Magnetic Materials: 5.1 Introduction
		2nd(17.10.2023	5.2 Classification 5.2.1 Diamagnetism
		3rd(20.10.2023	5.2.2 Para magnetism 5.2.3 Ferromagnetism
12	12th Week	1st(30.10.2023	5.2.2 Para magnetism
		2nd(31.10.2023	5.2.3 Ferromagnetism
		2nd(3.11.2023	5.5 Eddy Currents
		2nd(04.11.2023	5.6 Curie Point
13	13th Week	1st(06.11.2023	Materials for Special Purposes 6.1 Introduction
		2nd(07.11.2023	6.2 Structural Materials
		3rd(10.11.2023	6.3 Protective Materials 6.3.1 Lead
		4th(11.11.2023	6.3.2 Steel tapes, wires and strips
14	14th Week	1st(13.11.2023	6.4 Other Materials 6.4.1 Thermocouple materials
		2nd(14.11.2023	6.4.2 Bimetals 6.4.3 Soldering Materials
		3rd(17.11.2023	6.4.4 Fuse and Fuse materials.

		4th(18.11.2023	6.4.4 Fuse and Fuse materials
	15th Week	1st(20.11.2023	6.3.2 Steel tapes, wires and strips
		2nd(21.11.2023	6.3.2 Steel tapes, wires and strips
		3rd(24.11.2023	6.4 Other Materials 6.4.1 Thermocouple materials
		4th(25.11.2023	6.4.5 Dehydrating material.
	16th Week	1st(28.11.2023	6.4.5 Dehydrating material.